PILE NOTATIONS Entered in 170 File Laketter Louist Far Daniel Language Lector Drawn Linday and COMPLETION DATA: Location Inspected Date Well Captated .. Bond released W. . . . WW. . . . TA. . . . State or Fee Land GW. ... OS. ... PA. ... LOSS FILED Deliter's fier.......... State (1986) Book that the state of the stat The state of the second CSLog..... CCLog. Others..........

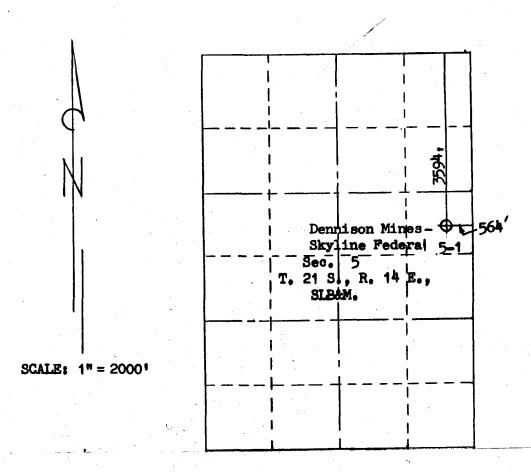


SUBMIT IN TRECATE* (Other instructions on reverse side)

Form approved. Budget Bureau No. 42 R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR

		T OF THE INTE	ERIOR	. ** 	5. LEASE DESIGNATIO	N AND SERIAL NO.
	N FOR PERMIT	TO DRILL, DEE	PEN, OR PLUG B	ACK	6. IF INDIAN, ALLOTT	EE OR TRIBE NAME
b. TYPE OF WELL	RILL 🟝	DEEPEN 🗌	PLUG BAG	CK 🗆	7. UNIT AGREEMENT	NAME
	GAS WELL OTHER		SINGLE MULTIP	LE X	8. FARM OR LEASE N	AME
Denison A	ines Ltd.				9. WELL NO.	
3. ADDRESS OF OPERATOR		Calcary Al	berta, Canada		10. FIELD AND POOL,	
4. LOCATION OF WELL (Report location clearly and	in accordance with any	State requirements.*)		- W C PROE,	OR WILDCAP 64.
At proposed prod. zo		5, T21S-R1	4E SE NE		11. SEC., T., R., M., OF AND SURVEY OR 5721 S-RILE	
14. DISTANCE IN MILES	AND DIRECTION FROM NEA	rest town or post off			12. COUNTY OR PARIS	H 13. STATE
15. DISTANCE FROM PRO LOCATION TO NEARE PROPERTY OR LEASE	POSED* 564 1	16.	NO. OF ACRES IN LEASE 386.67		of acres assigned this well 160	
18. DISTANCE FROM PRO TO NEAREST WELL, OR APPLIED FOR, ON T	DRILLING, COMPLETED,	ione 19.	PROPOSED DEPTH		ARY OR CABLE TOOLS	
21. ELEVATIONS (Show w 4568 Gr. 23.	hether DF, RT, GR, etc.)				Jan 2, 197	_ ★
STATE OF TOTAL		· · · · · · · · · · · · · · · · · · ·	ND CEMENTING PROGRA	.M. ·	<u> </u>	
SIZE OF HOLE	SIZE OF CASING	32.75	SETTING DEPTH		QUANTITY OF CEM	ENT
9 7/8	7 5/8	26.40	3000 '		60 sks.	
6 3/4	5 1/2	10.50	6000		200" (Prod.	str.)
mud if ned equipment,	essary. Use	R C-3 regul N-S).	prepared to ge hydraulic BOP ation due to	and a	il regulate	
N ABOVE SPACE DESCRII one. If proposal is to reventer program, if a 4.	J. S. Goologic Itah Cil and Co Skyline Cil Co BE PROPOSED PROGRAM: If O drill or deepen directions	Survey (ids Conserva) apany (1) proposal is to deepen or ully, give pertinent data	r plug back, give data on pi on subsurface locations an	esent proc	ductive zone and propos	ths. Give blowout
APPROVED BYCONDITIONS OF APPRO	VAL, IF ANY:	TITLE	ACCROVAN NATE		DATE	



SURVEYORS CERTIFICATE

I, GEORGE H. NEWELL A REGISTERED LAND SURVEYOR AS PRESCRIBED BY THE LAWS OF THE STATE OF UTAH, HOLDING LICENSE NO. 1770, CERTIFY THAT THIS PLAT OF:

DENNISON MINES - SKYLINE FEDERAL 5 - 1

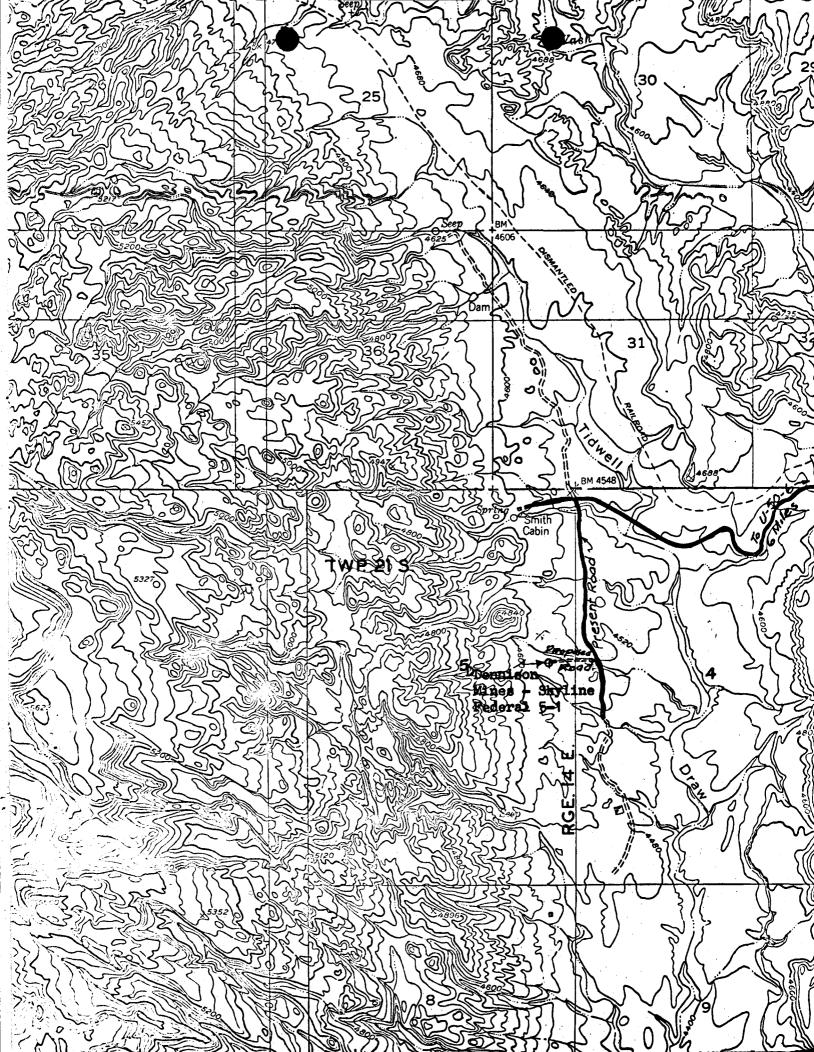
AND MORE SPECIFICALLY DESCRIBED AS FOLLOWS:

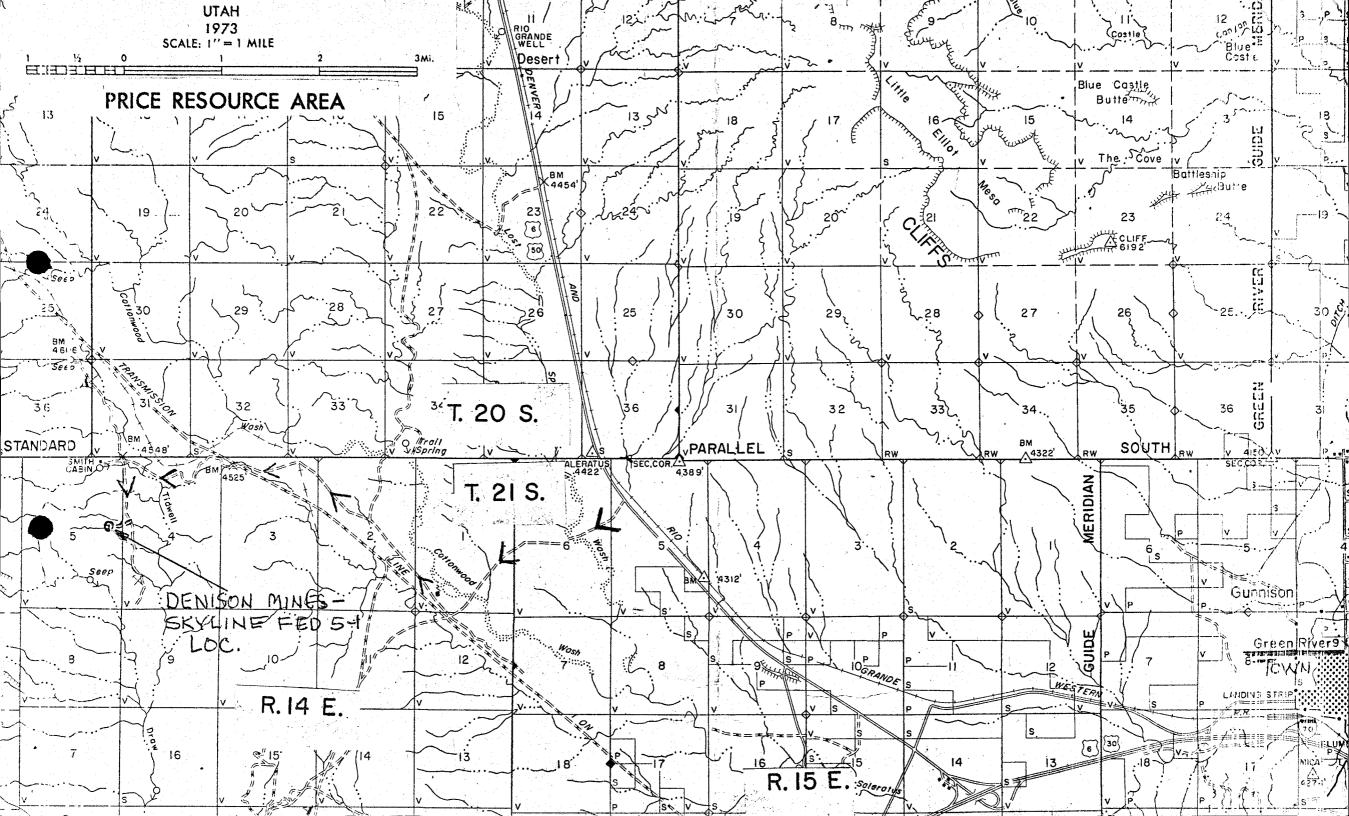
3594 feet from the North line and 564 feet from the East line of Section 5, T. 21 S., R. 14 E., SLB&M. Ground line elevation 4568.

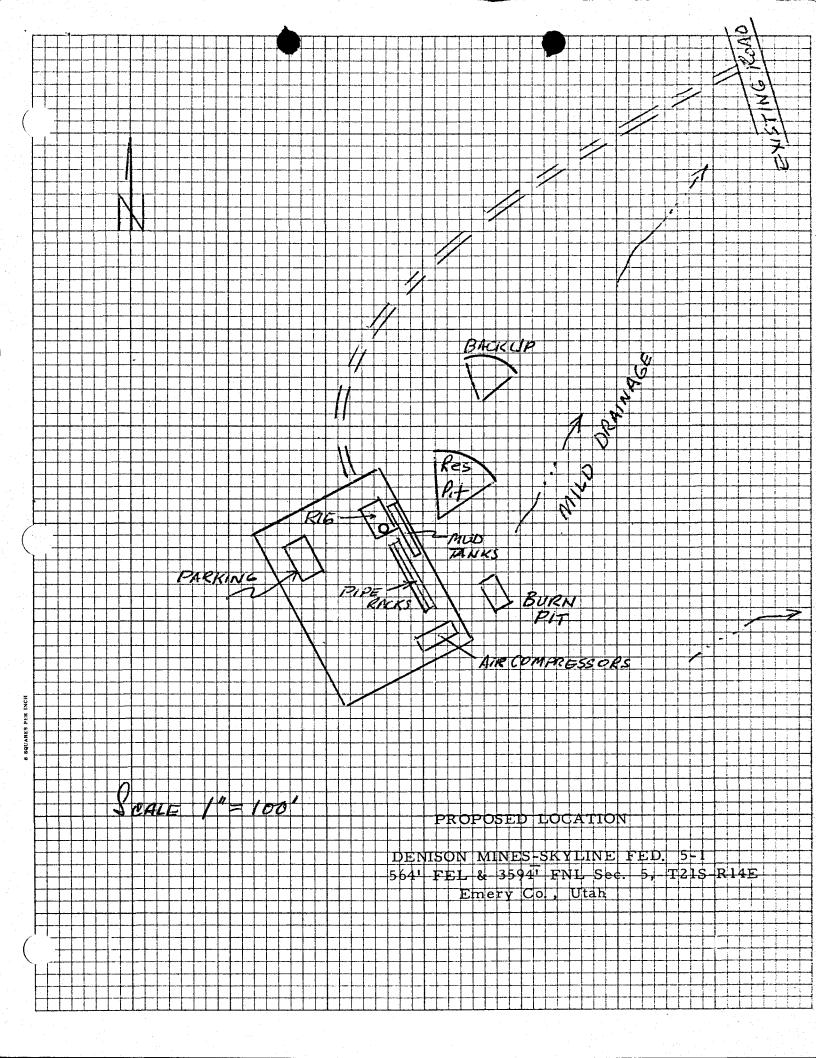
IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE December 5, 1973

GEORGE H. NEWELL











RES. 649-8734 PARK CITY PRODUCING OIL

LIFE MEMBER

GRAHAM S. CAMPBELL

CERTIFIED PROFESSIONAL GEOLOGIST 832 OF A.I.P.G.

1412 WALKER BANK BLDG.

SALT LAKE CITY, UTAH 84111

December 10, 1973

U. S. Geological Survey Conservation Dixision 8416 Federal Building Salt Lake City, Utah 84111

Attention: Ar. Gerald Daniels

Proposed Denison Mines - Skyline Fed. 5-1 5641 FEL. 35941 FNL, Sec. 5, T213-R14E, S.L.A. Emery County, Utah U.S.A. Gov t GII and Gas Lease U-7694

12 Point Development Plan

- Existing Roads See attached 1973 BLM Flanimetric map showing pointers to an approach road from Highway 6 and 50.
- 2. Flanned Access Roads - See same map on which last 1/4 mile to proposed location is dashed in.
- Existing Wells Nearest well abandoned, 3 miles northeast, Sec. 33. T205-RILE.
- Lateral roads to well locations. Not applicable.
- 5. Location of tank batteries and flow lines when or if production is established, proposed tanks shown on location sketch attached.
- Location and type of water supply We plan to air drill but if water is needed the Green River water is to be used. Access just south of Green River town.
- Method for handling waste disposal. See sketch map for reserve pit (for cuttings), back up pit, and trash pit. All to be restored to original contour unless needed for producing operation.

U. S. Goological Survey - cont'd December 10, 1973 Page 2

- 8. No camps.
- 9. No airstrips closer than Green River toen.
- 10. Location of rig; mud tanks, pipe racks, pits, etc. See sketch map attached.
- il. Restoration The Carmel shale will be re-moided to original configuration with particular attention to minimizing subsequent erosion.
- 12. Environmental data Area is arid, very low vegetation yield and/or animal density potential. Because of gypsum, subject to locally heavy erosion.

Comments - Location placed about 100' east of center line of 40 to minimize surface disturbance.

Submitted by.

Geological Engineer

Certified Professional Geologist #832

Operator's Representative

GSC:gb Enc.

Distr.: U.S.G.S. (3) U.O.G.C.C. (1) Denison Rines (3) Skyline Oll (1)

December 12, 1973 Denison Mines Ltd. 540 - 5 Avenue S.W. Calgary, Alberta Canada Re: Well no. Denison Mines -Skyline Federal 5-1 Sec. 5, T. 21 S, R. 14 E, Emery County, Utah Gentlemen: Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following: PAUL W. BURCHELL - Chief Petroleum Engineer HOME: 277-2890 OFFICE: 328-5771 Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation relative to the above will be greatly appreciated. The API number assigned to this well is 43-015-30018. Very truly yours, DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT DIRECTOR

CBF:sd

cc: U.S. Geological Survey

PHONE 801 355-8256

GRAHAM S. CAMPBELL

OIL OPERATOR

1412 WALKER BANK BLDG.

SALT LAKE CITY, UTAH 84111

December 19, 1973

U. S. Geological Survey 8426 Federal Building 125 South State Street Salt-Lake City, Utah 84111

Addenda to Application to Drill and 12 Point Environmental Plan re:

Denison-Skyline Federal 5-1 Sec. 5, T21S-R14E, S.L.M. U-769

Gentlemen:

Response to recent memo dated 12-11-73 follows:

- 1. Surface casing 10 3/4" 0.D. 32.75# J-55 new. Circ. cement to surface. W.O.C. 8 hours.
- 2. Bradenhead 10" A.P.1. 3,000 psi 10 3/4 8 RT CCT-C 22 Casinghead with 2 - 2" LP openings. Csq. Hanger 10" x 7 5/8" CCT C-22 3,000 psi
- 3. Plan to run 1300' 7 5/8" LT & G K-55 CF & 1 API blk. smls. casing R-3 used (in hole 4 days power tongs torque control used). Follow 1300' with change over coupling and 1700' 7 5/8" ST & C K-55 new csg. Cement with 100 sks. Hang in tension in casing hange: (above). Will be hooked up with 2" XHD line into Bradenhead with 3,000 psi valve and XHD builplug.
- 4. Blow Out Preventer Hydraulic
 Double ram 10" 900 lower flange, studded, with new gauge ring. Upper flange same. 3,000 psi WP. 5,000 psi test.
 Shaffer KC Mod. 50. Fillup, kill and choke lines and all valves 3000 psi minimum W.P.

Rotating BOP - Shaffer 900 series 3,000 - 5,000 psi flange. Into lewer BOP with study and gauge ring.

5. Floor valve - sub to fit 4 1/2" FH box on H-90 drill place. with 4" full opening valve 3,000 psi min. test.

Kelly Cock - B.J. 5,000 psi min. between Kelly and swivel. Safety chain on hose at all times.

U. S. Geological Survey December 19, 1973 Page Two

Baker bit float - 5,000 psi test in 6 1/4" drill collars.

Baker string float - on standby to fit 4 1/2" DP tool joint.

6. This is a wildcat. No reason to expect more than commensurate hydrestatic head of 9.5 lb./gal. mud @ various depths, i.e. 125 psi at surface casing shoe @ 250! 1500 psi @ intermediate casing shoe @ 3000! 3000 psi @ T.D. (possible 5 1/2" shoe) @ 6,000!

It is intended to air/mist drill this well as long as practical, thus relieving hydrostatic head at the bit and accordingly reducing lost circulation probabilities. If, however, water, sloughing or other problems arise, all provisions for mudding up will be on location as a central measure. Low solids type mud (9.5 lb.) will be used.

Whenever or wherever crooked hole signs arise, tungsten carbida spiral type stabilizers will be used.

Submitted by

Geological Engineer

GSC:gb

Form 9-331 (May 1963)

2.

4.

16.

TEST WATER SHUT-OFF

FRACTURE TREAT

REPAIR WELL

(Other)

STATES SUBMIT IN TRIP THE INTERIOR (Other instruction verse side)

Form approved.

-2		Buaget	Dureau	NO.	42-A	144
5.	LEASE	DESIGN	476'9E	ID S	ERIAL	NO

REPAIRING WELL

ALTERING CASING

/	GEOLOGICAL SURVEY	U-7094
	SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1.	OIL GAS OTHER	7. UNIT AGREEMENT NAME
2.	NAME OF OPERATOR Denisen Mines Ltd.	8. FARM OR LEASE NAME
3.	ADDRESS OF OPERATOR 1500 - 444 - 5th Ave. S.W., Calgary, Alberta T2P,	9. WELL NO. Denison Mines-Skylin
4.	LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* Canada See also space 17 below.) At surface	10. FIELD AND POOL, OR WILDCAT
	564 FEL 3594 FNL Sec. 5, T215-R14E	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 5/215/14E
14.	PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4568 Gr.	Emery Utah

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

ABANDONMENT* SHOOTING OR ACIDIZING SHOOT OR ACIDIZE ABANDON* CHANGE PLANS (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

WATER SHUT-OFF

FRACTURE TREATMENT

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Due to easing shortage plans altered to:

PULL OR ALTER CASING

MULTIPLE COMPLETE

drill 12 1/4" air hole to 2501 run 250' 9 5/8" 32.30# H-40 easing ST & C New, R-2 w/guide shee and centralizer, 140 sk cement. WOC 8 hrs. woc 8 hrs.

Small out w/ 7 7/8" air/mist to T.D. or mud up.

APPROVED BY DIVISION OF OIL & GAS CONSERVATION

SUBSEQUENT REPORT OF:

Dist: U.S. Geological Survey (2) U.O.G.C.C. (1)

NOTICE OF INTENTION TO:

			* 4		3
18. I hereby certify that the foregoing is true and corr	ect TITLE	Opr. Repr.		DATE	
<u> </u>		Beel. Engr.			
(This space for Federal or/State office use)					
APPROVED BYCONDITIONS OF APPROVAL, IF ANY:	_ TITLE _			DATE	



Operator Denison Minas,	Ltd. F	lepresentative_	Graham C	ampbell	
Well No. 5-1 Locate		c. <u>5</u> Tw	p. 213	Range 14 E	•
Lease No. U 7694	Field W.C	. Eme	ry Co.	State Utah	·
Unit Name and Required Depth Long	Base of	fresh water sa	nds Non	a noted	
Size hold and T.D. 6000 Fill per Sack	61/4 " 4"	Mud Weight and Top		#/Gal'	
Casing Set Top of To Be		Plugging R	equirements		
Size At Cement Pulled	From	То	Sacks	Cement	
9 % 261 Cire	3100	2900	5038	· · · · · · · · · · · · · · · · · · ·	
7 5/8 1706 cire	2100	1900	50 sx		
Formation Top Base Shows	1800	1600	35 sx		
Jinbad 2070	eut off 7"	below top 95%	to recover	esq hugr.	
Kaibab 2320	20 5x @ 50	rface w/ mk	lr.		
WhiteRim 2425	-		· .		
Elephontlyn 3070				·	
Hermosa 5255				·	
Molas 5700					
M 1551551 ppian 5824					
	Rema	<u>rks</u>			
DST's, lost circulation zones	, water zones, et	c. Brackesh +	vator flow	in Whita Rim	
@ 2910		•			
				,	
Approved by 98 Pour	Dat	e <u>3/3/74</u>	Tio	A.M ne <u>9;00 P.M</u>	

state Q & F.

UNIDED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

SUBMIT IN DUPLICATI

(See other instructions on reverse side)

Form approved. Budget Bureau No. 42-R355.5

٠.	LEASE DI	SIGNATI	ON AND	SERIAL	NO
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ı		- 11	- /hy//			

	MPLETION	OR RECON	APLETION	REPORT A	AND LOC	3* ⁶	, IF INDIA	N, ALLO	TTEE OR TRIBE NA
1a. TYPE OF WE	WELL	GAS WELL	DRY X	Other		7	. UNIT AG	REEMEN	r name
b. TYPE OF COM	IPLETION: WORK DEEP	PLUG	DIFF.				- 14 - 15 <u>- 15 - 15 - 15 - 15 - 15 - 15 - 1</u>		
WELL	OVER L EN	BACK	RESVR.	Other		s	. FARM OR	LEASE	NAME
	on Mines L	td.					. WELL NO		
			Calgary	Alberta	T2P 28	T . D	eniso	n-Sk	yline Fed
								ND POOL	, OR WILDCAT
At surface	64 FEL 35	clearly and in a	ccordance with a	ny State require 215–R111	ments)*		W .	D 35 4	OR BLOCK AND SURV
	terval reported belo	. ,	,	2.0 114			OR ARE	A	
	tervar reported bero	w					5, T2	IS-F	814E
At total depth			14. PERMIT NO		- TOOLUD		O GOVERN	0.5	13. STATE
			14. PERMIT NO	. "	ATE ISSUED	1	2. COUNTY PARISH	UK	IS. STATE
. DATE SPUDDED	16. DATE T.D. REA	CHED 17. DATE	COMPL. (Ready,		ELEVATIONS (DI	F, RKB, RT,	GR, ETC.)*	19. F	LEV. CASINGHEAD
Jan. 1974	<u> </u>			, <i>l</i>	₄ 568 G		· 		
6000		BACK T.D., MD & T	HOW M		23. INTE	RVALS I	A I I	ors	CABLE TOOLS
. PRODUCING INTE	RVAL(S), OF THIS CO	OMPLETION—TOP,	BOTTOM, NAME (MD AND TVD)*				25	. WAS DIRECTIONA SURVEY MADE
None)					No
. TYPE ELECTRIC	AND OTHER LOGS RU	N		<u> </u>				27. W	AS WELL CORED
DIL, E	BHC-GR, FD	C-GR		Ť.					
•			NG RECORD (Re	oort all strings	set in well)				
5/8 ¹¹	32.30			LE SIZE	108 Cu.	ENTING REC		,	None None
7/0	23#		K.B. 12		•	Ft. S	- 7		None
		1706	K.B. 8	3/4"	550 Cu.	11.	, , (0,1,1,	<u>'</u>	
		0		3					
	L	NER RECORD		5 = '	30.	TUE	ING REC	ORD	
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD	SIZE	DEP	TH SET (1	(D)	PACKER SET (MD
		` ` ` ` ` ` ` ` ` ` ` ` `		7					
. PERFORATION RE	CORD (Interval, size	and number)		32.	ACID, SHOT,	FRACTUR	e cemen	T SOIT	EFZE ETC
		- = 1		DEPTH INTE					ATERIAL USED
				4					
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		nement a		, 3	·				
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TE FIRST PRODUCT	TON PRODUCT	FION METHOD (F	lowing, gas lift, p		nd type of pum	p)		STATUS	(Producing or
TE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N, FOR TEST PERIOD	OIL—BBL.	GAS—MCI	F. W	VATER—BB	L.	GAS-OIL RATIO
OW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS—M	CF.	WATER-BB	L.	OIL GR	AVITY-API (CORR.)
· .	AS (Sold, used for fu	iel, vented, etc.)				T	ST WITNE	SSED BY	
omplete	da/ily dril			7 .	-				
	that the foregoing	and attached inf	ormation is comp	lete and correc	t as determined	d from all	available	records	
	JIII Joregoing								
SIGNED	Il Comple		_ TITLE	eoi. Ena	<u> </u>	ent ·	DAT	E	

NSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 83, below regarding separate completions.

attachments If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments

should be listed on this form, see item 35.

item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State Hen 18 Indicator specime manuscriptures.

If then 18 Indicator specime manuscriptures are a statement of the production of the production of the production of the production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the production interval intervals, top(s), bottom(s) and name(s) (if any) for only the interval-reported in item 33. Submit a separate report (page) on this form, adequately identified, or Federal office for specific instructions.

or intervals, top(s), bottom(s) and name(s) (if any) for only the interval-reported in item 33. Submit a separate report (page) on this form, adequately additional interval to be separately produced, showing the additional data pertinent to such interval. "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. Item 29: Item 33:

• U (

Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

TRUB VERT. DEPTH TOP DEPTH GROLOGIC MARKERS MEAS. 1 NAME 38. SUMMARY-OF POROUS ZONES:
SHOW-ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THERBOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING
DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PERSKEIBES, AND RECOVERIES 100 (F) DESCRIPTION, CONTENTS, ETC. for ć con les C 0 0 V daily drilling resort CODY CODY G 1 60 us additional U.O.6.C. U.S.6.S Skyline Denison Distribution: requested, pl attached BOTTOM See TOP i FORMATION 0 0 5 (

APR 23 1974

U.S. GOVERNMENT PRINTING OFFICE: 1963-O-683636

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for each

871-233

1/2	GEOLOGICAL SU		SUBMIT IN TI (Other instruction on verse side)	5. LEASE DESIGNA U-7694	proved. Bureau No. 42-R142 TION AND SERIAL NO.
(Do not use this form for pro Use "APPL	OTICES AND REPOPOSALS to drill or to deep LICATION FOR PERMIT			6. IF INDIAN, ALL	OTTEE OR TRIBE NAMI
OIL GAS OTHER	P & A			7. UNIT AGREEMEN	NT NAME
2. NAME OF OPERATOR Denison Mines 1	Ltd.	* * * * * * * * * * * * * * * * * * *	** •; • • • • • • • • • • • • • • • • •	8. FARM OR LEAST Denison-S	
3. ADDRESS OF OPERATOR 1500 - 444 5th A					
4. LOCATION OF WELL (Report location See also space 17 below.) At surface	* *		requirements.*	10. FIELD AND PO	
564' FEL 3594'	PML Sec. 9, T	215-R14E		11. SEC., T., R., M. SURVEY OR 5/T218/R14	AREA
14. PERMIT NO.	15. ELEVATIONS (Show 4568 G.	w whether DF, RT, G		12. COUNTY OF P.	Utah
16. Check	Appropriate Box To I	ndicate Nature	of Notice, Report, o	or Other Data	
50 sks. 1 cut off 7" be then screwe	octionally drilled, give subsectionally drill	cant. cir cu. ft.	Completion or Reccills, and give pertinent dand measured and true versions. C. to surf. W/cement. 20	ALTERI ABANDO ults of multiple comple ompletion Report and Le tes, including estimate rtical depths for all ma	og form.) d date of starting al arkers and zones per
usean in the second of the sec					

DATE

TITLE

(This space for Federal or State office use)

APPROVED BY ______ CONDITIONS OF APPROVAL, IF ANY:

Please reply to G. S. Campbell, 1412 Walker Bank Building, Salt Lake City, Utah 84111 - info to Dedison

*See Instructions on Reverse Side

WELL REPORT

Denison Mines Ltd. - Operator

Denison-Skyline Federal 5-1

T21S-R14E, S.L.M., Emery County, Utah

Sec. 5: 564 FEL 3594 FNL

Ele. 4568 G.

4577 К.В.

T.D. 6.000:

Interested parties besides Operator - Skyline Oil Company (farmor)

Prime Contractor - Barker Drilling and Well Service Pusher, Vern Powers; Air Contractor,
Western Air Drilling with Jerry Smith

Opr. Representative - G. S. Campbell

Spud - January 8, 1974 Completed drilling 2200 Hr. March 1, 1972

Status - P & A March 4, 1974

Cores - none; D.S.T.'s - 2 - see Daily Drilling Report for March 3 and 4

Mud - Magcobar

E. Log tops - See Daily Log for March 2.

Geologic Wellsite Attendance - P. R. Peterson with the mechanical assistance of gas detecting or mud logging equipment leased from Rocky Mountain Engineering Co.

Logs - In addition to the detailed litholog prepared by Peterson which includes drilling rates and other detail, DIL, BHC-GR, FDC-GR, CLN were run from 6,000 to casing shoe (1607).



Sample Program - 20' samples 0 - 1000' and 10' samples from 1000 - T.D. One dry envelope cut placed in Utah Geological Survey depository and bagged (wet) cut shipped to Amstrat in Denver, Colorado.

Operational Difficulties - Casing shortages dictated drilling prognosis.

Water at 60 feet in Carmel gypsum resulted in crater like blow out from air drilling. Mudded up and had serious lost circulation in surface hole.

Wingate water upwards of 600 bbls./hr. exposed to water sensitive Chinle shale necessitated running 7" casing @ 1706.

White Rim water volume too large to mist drill. Finally reached successful combination of aerating formation water with one compressor, one booster and rig pump wasting 250 bbl./formationwater/hr.

Bit record - See daily drilling log for January 31, February 20th, and March 4th.

Geologic Comments and Correlations - The prospect and drilling
effort purports to bracket Paradox Basin shoreline
environment where reefing and/or reservoir building
is most likely. Together with pre-Pa objectives,
Mississippian reefing as found in the Toledo well
(2.75 mi. NE) was the deepest objective.

400 feet of shoreward Pennsylvanian thinning from the Toledo well was found as predicted. The several hundred feet of salt in the Toledo well was accordingly absent. Porosities were comparatively excellent in the Pa section. The Mississippian reefing was absent.



Geologic Comments and Correlations - contid

Shows were scattered throughout the Pa rocks but meager at best.

Correlations after Reed G. Spjut of Skyline are as follows

	This well 5/T2IS/RI4E	Toledo Well 33/T20S/R14E
Ismay Desert Creek Desert Creek base Log Marker	4268 4545 4799 5020	5580 5981 6197 6350 6532
Low Hermosa ? Marker Mississippian	5400 5726 5822	6808 7168 7330

Permits, Government Requirements, etc. - after

Daily Drilling Report

Daily Drilling Report - follows

Daily Drilling Report

Denison Mines-Skyline Fed. 5-1 T21S-R14E, Emery County, Utah

- 4 January 1974 Finishing moving in
- 5 January 1974 Rig up (another snow storm)
- 6 January 1974 Call from tool pusher (Vern Powers). Should spud 7th if weather holds off. I called for standby mud in case needed for top holes. Casing on location 0.K.
- 7 January 1974 Finished rat hole and mouse hole
- 8 January 1974 SPUD 1:00 a.m. 12 1/4 RR w/air mist.
 Drilling 8:00 a.m. @ 61' w/2 stabilizers and 1 6 1/4" DC. Moist. Hard. Drilled to 101'.
- 9 January 1974 Water incr. washing out crater under rig. Shut down to mud up. Need more water. Wait on water truck. Finally lined up 2nd hauler. Resumed mud drilling. Losing circulation. Survey @ 681 1/40.
- 10 January 1974 Survey 68: 1/2° 120: 1/4°. Losing circulation.
 - Summary 10:00 a.m. @ 150. Have lost 900 bbls. mud to formation fractures.

54 sks. LCM 120 jel.

Return mud quality good. II:00 a.m. ordered Dowell RFC (Thixotropic) 300 cu. ft. cement w/100 1 1 L.P. prep. to set plugs or use to cement 9 5/8 .

Denison Mines-Skyline Fed. 5-1 T21S-R14E, Emery County, Utah

- 10 January 1974 (contid) Mixing mud and LCM @ 1441. Losing circulation regularly. Survey 1201 1/40.
- Il January 1974 Mixed mud and LCM. Drilled to 2121. Total 1800 bbls. mud lost to formation. Spotted 50 sacks RFC (Thixotropic) plug @ 212 @ 4:45 a.m. Fair returns. WOC 6 hours. Found top of plug 50 off bottom. Set plug #2 50 sk using 95° F. mix water @ 1621. @ 11:45 token returns. WOC 5 hrs. Tag top @ 1371 (251 plug). Ran 50 sk plug #3 down at 1745 hrs. No returns. WOC 5 hrs. Tag top of plug @ 1291 (81 plug). Ran plug #4, down @ 2330 hrs. Full returns. WOC 5 hrs.
- 12 January 1974 Tag top plug #4 @ 114 (15 plug). Ran plug #5 down @ 600 hrs. Full returns. WOC 5 hrs. Tag top plug @ 50 . Ran plug #6, down @ 1100 hrs. Full returns. WOC 6 hrs. (Snowing last 12 hrs.) Tag plug @ 25 . Drilling out plugs @ 1700 hrs.
- 13 January 1974 Finished drilling plugs to 212' w/full returns. Came out of hole. Ran bit #2 (12 1/4") Smith new. Put on 2 stabilizers. Had to ream from 20'. Finished reaming 1000 hrs. Started losing mud @ 224'. Survey @ 215' 1 1/2°. Lost 200 bbls. mud while drilling to 265'.
- 14 January 1974 Finished surface hole 100 hr. Ran 8 jts.
 (249.70' net) 9 5/8" 32.30 new H-40 casing.
 Landed at 261' K.B. Welded guide shoe and first collar top and bottom. Cemented with 80 sacks (112 cu. ft.) RFC (Thixotropic) in 80 degree F. mix water followed by 80 sacks (96 cu. ft.)
 Class G cement with 2% CaCl and 2% NaCl. Full returns throughout but no cement to surface. Ran 1" LP to 140' in annulus. Pumped 80 sacks. Token returns. WOC 0715 hr. to 1100 H. Circ. annulus through 1" LP to tag top plugs at 134'. Ran 25 sk. plug neat throng 1" at 1300 H. WOC 4 1/2 hours. Tag top of plugs @ 100'. Pumped 150 sks (210 cu. ft.) RFC full returns throughout. Plug down @ 1930 hrs. WOC. Released Dowell 2330 hrs.
- 15 January 1974 Nipple up to air drill. Drill out with Reed mill tooth (W-7 type) Bit #1 (7 7/8") @ 1500 hrs. Surveys 300' 2°, 400' 1 3/4°. Air drilling with 12000# 45 RPM 12'/hr.

Denison Mines-Skyline Fed. 5-1 T21S-R14E, Emery County, Utah

- 16 January 1974 RTNB @ 2821. Ran bit #2 (7 7/8") Smith S-5.
 Drilling @ 5201 121/hr. making water.
- 17 January 1974 Mist drilling on Bit #2 @ 709. Survey @ 600. 1 3/4 degree. Building additional pits. (23 hrs. drilling, I hr. surveys)
- 18 January 1974 Shut down @ 966! waiting on booster (broke down 0500). Survey 870! 2 1/4°. Making more water. Building more pits. Pulled bit while waiting. Ran Reed button YCM 5 Bit #3 (7 7/8"). Bit #2 566! 43 hours, out of gauge 1/8". Running Grant near bit roller type stabilizer and Grant integral blade 30 feet above. Shut down for booster 8 hours.
- 19 January, 1974 Mist drilling @ 1168 on Bit #3.
 6 10000# 45 RPM. # WEN Gardner Denver Air Compressors rated 600 CFM and I booster. Survey 1126: 3°
 CHINLE SAMPLE TOP 1304:
- 20 January 1974 Misting @ 1400' on Bit #3.

 Survey 1346' 3 1/2° (23 hr. drilling and 1 hr. survey)
- 21 January 1974 Survey @ 1662 3 1/2°. Misted to 1693 on Bit #3.

 RTNP @ 1693.

 Bit #3 727 74 hrs.

 Ran #4 Smith 5JS rebuilt.
- 22 January 1974 Misted to 17901. Started sloughing on last trip and sticking on connection at 1758 and 1788. Blew hole clean. Came out of hole sticking. Preparing to mud up @ 17901.

Note - Cumulative mud cost to date \$2919.

Released I compressor and mist pump. Began mixing mud and LCM.

23 January 1974 - Mixed 9 pits mud @ 200 bbls./pit by 1500 hrs.

Getting partial returns on 9th pit. Ordered Grant rotating head preparing to aerate mud.

Denison Mines-Skyline Fed. 5-1 T21S-R14E, Emery County, Utah

24 January 1974 - Continued to mix mud @ 150 vis 40% LCM (total 12 - 200 bbl. pits in last 30 hrs.) Getting 30 - 50% returns of mud. Start nipple up to aerate mud at 0800 hrs.

Set Grant Rotating head and aerator chamber with welder.

- 25 January 1974 Worked to bottom aerating nip and tuck making large water volume or losing mud (water) with varying amounts air. 240 feet fill up. Plugged bit at 1550 second time. Made it to T.D. (1790) 2100 hrs. Tracer logger on location. Came out to log.
- 26 January 1974 Ran tracer (radioactive isotope) log. Established loss zone @ 860' K.B. No loss below. Possible minor loss as high as 810'. Also ran gamma ray 1500 260 and caliper same interval.
- 27 January 1974 Started reaming to 8 3/4 with W7J Hughes Bit #5. RT 4501. Found out of gauge. Ran down hole reamer with Bit #6, STC L4R. Reaming with aerated water
- 28 January 1974 Reamed to 8201 on Bit #6, with 3 4000# 50 RPM.
- 29 January 1974 RTNB @ 820:. Ran Bit #7, STC 5JS. Reamed to 1600:.
- 30 January 1974 Reamed to 1750. Started out. Sticking first 3 stands off bottom. Came out. Mixed pit 60 vis mud. Went back to spot on bottom. Had to wash down last 180 feet. Used all mud washing to 1750. Started out, almost stuck. Used Kelly etc. came out laying down DP and DC. Prep. to run 7" casing.
- 31 January 1974 Ran 42 jts. 7" 23# R-3 ST & C 8 rd. used casing.

 Landed @ 1706 KB w/notched collar welded on shoe, baffle
 one jt. up, first collar welded. Casing down @ 0200.

Ran 170 cu. ft. Halliburton lite, 2% NaCl 3% CaCl plus 380 cu. ft. 50-50 pos 2% NaCl 3% CaCl. No returns expected nor received. Bumped plug 0300. Pressure increase on pump gauge. Incr. last 15 min. to 800 psi. WOC.

BIT REVIEW

#	Co.	Size '	Туре	Depth out	Ft. Cut	and Hrs.
Surf.		12 1/4	K2P	144	144	27 air
Surf.	n n	세월일 그 병원 등에 없었다.	K2J	265	121	$17\frac{1}{2}$ mud
1	Reed	8 3/4	Y31G	400	135	mist
2	STC	입자를 보냈다며 사람들도 함을	F5	966	566	
3	Reed	요즘은 아이지 도 나를 하나요요.	SCM5	1693	727	
4	STC	살아보고 보고 # 15 시 시 시 시 시 시 시 시 시 시 시 시 시 시 시 시 시 시	5JS	1790	97	# 1.5 pt
5	STC		F4	1790	Ó	0
6	HTC		W7J	568	307	25 Ream air/
				역하와 인물론 회사의 관하는 소속하다.		water
7	STC		ІДНЈ	840	272	23 Ream air/
			생명하는 사람이			water
8	STC		5JSRR	1750	910	? air/
						water
9	Reed	6 1/4	YSI	1792	130	4 mist
10	STC		F4	2450	658	42 Dust and
						mist

Dennison Mines, L+d. Skyline Fld. Formation top review #5-1

했습니다 하는 사람이 되는 이 나는 사람이 하는 이 가는 하는 것이 되는 것이 되는 것이 되었다.	100
Navajo sandstone	1541
Chinle shale	1230
Mossback sandstone	1450
Shinarump	1505
Moenkopi	1565
Sinbad limestone	2067
Moenkopi (1.) shale	2190
Kaibab limestone	2367
White Rim sandstone	2430
선물화를 가지하는 것으로 한맛을 했다. 그는 없어	
Drilling in White Rim @	25251

Denison Mines-Skyline Fed. 5-1 T215-R14E, Emery County, Utah

- I February 1974 Drilled plug and old hole w/Bit #9 6 1/4 Reed YSI misting to 1792. RTNB @ 1792 for Bit #10 S.T.C. F-4 w/Grant bott. hole reamer, integral bladed stabilizer at 30., 10 4 3/4" drill collars and 3 1/2 IF drill pipe. Blew hole 3/4 hr. to dust. Dusting @ 1850.
- 2 February 1974 Survey 1700' 3 1/2°, 1940 4°. Dusted on Bit #10 to 2130'. Wet. Start misting. Sinbad top 2065'
 Sand in Sinbad zone @ 2130 had dead oil scum.
- 3 February 1974 Survey @ 2200 5°.

 Kaibab @ 2367'.

 White Rim sand @ 2430'.

 5 600 bbls water/hr. @ 2430. Required 950 psi on booster to circulate. Prep to aerate @ 2450'.

 Out of hole. Removed stabilizer.
- 4 February 1974 Aerating on Bit #11 STC F-7 w/700# on booster and two compressors. Using formation water only. 550# on rig pump.

 Aerating water at 2500!.
- 5 February 1974 RTNB @ 2581. Ran Bit #12 Reed FPCH5. Ran jet sub 8001.
 Survey 2370 5 1/20.
 Aerating @ 26001 w/700# booster and 550 rig pump w/formation water. Excess water 2 300 bbls./hr.
- 6 February 1974 RTNB 2720. Ran Bit #13, STC SS5. (Bit 12 made 239! 29 hrs.) in White Rim sand and quartzite.
- 7 February 1974 Aerating @ 2804 on Bit #13. RTNB @ 2858. Ran Bit #14 Reed F72J. Bit #13 cut 139: 26 1/4 hrs.
- 8 February 1974 Compressor breakdown. 10 hrs. repair and wait on parts from Grand Junction. Developing scale in drill string.
- 9 February 1974 Aerating @ 2950 in White Rim quartzite. Came out of hole 300; to check for drag and run survey. No drag. Survey tool would not go through calcite scale in drill collars. Could not find smaller OD tool. Ordered 2" ID DC. Survey 2660 8 1/20 (300; off bott.). Wait on DC from Vernal.

Denison Mines-Skyline Fed. 5-1 T2IS-RI4E, Emery County, Utah

10 February 1974 - Came out of hole @ 2963 Change out D.C.
Ran Hughes J-55 Bit #15. No reamer, bladed stabilizer @ 601. Took wt. at 26341. Worked to bottom. No fillup. Drilled Kelly down to 29751. Survey at 29651 120 plus.

Treating for scale at rig pump suction.

Aerating @ 29851 in quartzitic sand with two compressors, booster (750 psi), rig pump (450 psi) and formation water. Still making excess of 250 bbl./hr. est.

Top Cutler formation 29921.

- Il February 1974 Aerating in Cutler shale @ 3050! on Bit 15.
 Survey 3020 12° RTNB 3110. Ran Bit #16 HTC OWCJ.
 Bit 15 cut 122!, 25 3/4 hrs. Survey 3090 12°.
 Running I bladed stabilizer @ 60! only.
- 12 February 1974 Aerating @ 3126 on Bit #16. Top Elephant Canyon (Permian Carbonates) 30931. Using one compressor and one booster plus rig pump.

RTNB @ 31451. Bit #16 cut 611 in 13 hrs. Ran Reed FPCH 6 Bit #17. Survey 31591 11 3/40. Ran 10 more D.C. Now running 20 D.C. 2" 1.D. Treating for scale and oxidation.

- 13 February 1974 Aerating @ 31921. Arranged for a Christensen Diamond bit.
- 14 February 1974 RTNB @ 3317. Bit 17 cut 1721 37 1/2 hr. Ran Bit 18, Reed FPCH 5. Survey 3300 10°.
- 15 February 1974 Aerating with formation water @ 3440 on Bit #18 in Pm Carbonates (Elephant Canyon). RTNB 3450. Survey 3445 80. Ran Bit #19 STC F-5

SHOWS in dolomitic sandy limestones with minor visible porosity @:

3270			weak
3280	-	90	V. weak
3350			V. weak
3410			fair
3420		30	weak
3460			V. weak
3470			weak
3510			fair
35 20		30	weak

Denison Mines - Skyline Fed. 5-1 T2IS-R14E, Emery County, Utah

- 16 February 1974 Aerating with I compressor, I booster and rig pump. Making approximately 200 bbls./hr. excess water. Survey 3570 8°. Survey 3777 8°.
- 17 February 1974 Aerating @ 3880! on Bit #19. Drilling break @ 3825 40 back to 2"/ft. in surcose 1st.
 No show.

At this horizon well running 400 high to Toledo well (23/4 mi. north east) and stratigraphic thinning since Permian Carbonates (3093) has been 40. No show in break.

RTNB 3989. Bit #19 cut 4491 38 3/4 hrs. Ran Bit #20. STC F-5.

18 February 1974 - Aerating @ 40041. Survey @ 39801 80.

Denison Mines - Skyline Fed. 5-1 T21S-R14E, Emery County, Utah

19 February 1974 - Aerating @ 4211 on bit #20. Survey 4238 - 80. Formation water sample taken at 4250 depth.

Ph 8.0 Pf 0.0 cc Mf 2.5 cc Cl-- 8000 Ca++ 2760 ppm

20 February 1974 - RTNB 4435 Bit #20 made 446 46 1/2 hrs. Ran STC FC 5 Bit #21. Repair rig 4 hours while out of hole. Derrick still settling on east side. Very windy. Back in hole very slowly. Survey 4435 - 80.

Show review below 3520. 3540, 3595, 3610, 3755, 3855, 3875, 95, 3905, 15, 40, 55, 75, 85, 90, 4005, 45, 85, 90, 4110, 25, 35, 50, 60, 70, 85, 95, 4210, 4360, 85, 4405, 20, 4565, 75, 85, 95.

Correlations:

At 3825, running 1025 high to Toledo well At 4525 Black Shale. Equivalent to:

Toledo well 5880: Woodside Fed. 8-1 5870: Black Dragon 1700: 5480:

Comments - Anhydrite and gyp zone at 4450-90 probably equal to first salt in Toledo well @ 57001, thus indicating 1801 of thinning between 3825 and 4450 as compared to the Toledo well.

BIT REVIEW - contid

#	Co.	Size	Type	Depth out	Ft. Cut	Hrs.
112314561789021	STC Reed STC Reed HTC HTC Reed Reed STC STC STC	6 1/4" 11 11 11 11 11 11 11 11 11	F7 FCH 5 SS 5 F725 OWCH 5 FCH 5 FC 5 FC 5 FC 5	2481 2770 2859 2964 3086 3145 3540 3889 4435	131 239 139 105 122 59 172 2449 446	25 1/2 29 261/4 27 25 3/4 13 37 1/4 28 3/4 46 1/2

21 February 1974 - Aerating in Pa evaporites @ 4575 on Bit #21 with 20000# bit out, 500 rig pump press, 500# on booster and using one compressor.

Denison Mines - Skyline Fed. 5-1 T21S-R14E, Emery County, Utah

22 February 1974 - Had distinct drilling break 4762 - 75 down to 2 min./ft. from 7 min./ft. Circ. sample. No show in limestone or dolomite. Globs of drill collar dope (?) confused. No gas on detector. Decided it was salt.

Aerating @ 4800; Levelled derrick. Crew from Duchesne. RTNB 4864; Bit #21 cut 429; 37 hours. Ran #22 STC SS 5

- 23 February 1974 Aerating @ 4946 on Bit #22 with one compressor, booster (500 psi), rig pump (525 psi) with formation water from White Rim sandstone. Excess water averaging 255 bbl./hr.

 Water sample taken @ 48001 depth:
 32,000 ppm CI-52,800 ppm NaCI
- 24 February 1974 Aerating @ 5195 on bit 22. RTNB @ 5296
- 25 February 1974 Bit 22 cut 432* 41 1/2 hr. Ran STC F-4 #23. Survey 5296 80

 Diamond bit on location (Christensen)
 Searching for more 6 1/4" insert bits.
- 26 February 1974 Aerating @ 5450 on Bit #23. RTNB 5444. Bit 23 cut 159' 21 1/2 hr. Ran Bit 24 STC F-4
- 27 February 1974 Aerating @ 5576 on Bit #24. Small show in limy dolomite @ 5510 20. Tite fluorescence after dry in chlorothene.

 Litho marker. Pink siltstone @ 5590. Molas?
- 28 February 1974 RTNB 57231. Bit 24 cut 2681 37 1/2 hr. Ran #25 Sec S-88. Miss. sample top 57261. White chalky limestone. Calcite xls. Soft. No show.
- 1 March 1974 Aerating in Miss. ? @ 5870 on bit 25. T.D. 6,000 2200 hr. Cleaned hole 1/2 hr. Came out to E Log. Released Mud Logger.

Dennison Miris Isa

.Daily Drilling Report - contid

Denison Mines-Skyline Fed. 5-1 T2IS-R14E, Emery County, Utah

salt.

2 March 1974 - Ran DIL, BHC - GR, FDC - GR, CLN. E log depth 5997.
Release Air Compressor 0900
Trucked mud materials off location.
Analyzed logs. Decided to test two zones
as precautionary measures.
Wait on windstorm to go back in hole 8 hr.
Wait on tester.

E Log Tops:

Water wet.

Sinbad limestone	2070	
Lower Moenkopi	2170	
Kaibab limestone	23 7 0	
White Rim sandstone Cutler ark.	2/ ₁ 25 2990	
Elephant Cnyn.	3070	
Pa	? ?	
Pa Hermosa (1) Molas	5255 5700	
Mississippian	5824 (-1247)
T.D.	6000	

The "SALT" @ 4762 - 75 turned out to be some kind of sand. Either dolomite, limestone, anhydrite. Not bedded

3 March - 1974 - D.S.T. #1 4335 - 4299 (401)
Upper Hermosa Straddle test
1.0. 5 min. (0600 H.)
ISI 1/2 hr., F.O. I hr. FSI I hr. SII blo to mod blo
in 5 min. held throughout F.O. NGTS. Rec. 17001
brackish water. Top chrt pressures:

1.H. 1754# F.H. 1754 1.F. 83 to 166 1.S.I.P. 1726 F.S.I.P. 1684 F.F. 221 to 800

Conclusion - Effective test. Non commercial.

E log analysis misleading. Fluid level in hole 3001 approx.

Small leak in drill pipe above tool.

Denison Mines-Skyline Fed. 5-1 T21S-R14E, Emery County, Utah

> D.S.T. #2 3855 - 3815 (401) Upper Hermos (Ismay?) Straddle test.

I.I. 5 min. 1520 hr., ISI 1/2 hr., F.O. I hr., F.S.I. I hr. Mod. to fair blow in 5 min. held throughout F.O. N.G.T.S.

Recovered 520' brackish water and 357' of sli gas cut formation (salty) water.

Top chart pressures:

1.H. 1554#. 1.F. 69 to 97 1.S.1.P. 1517 F.S.1.P. 1434 F.F. 124 to 263

Conclusion - Test was effective even with small drill pipe leak. Zone non commercial.

Secured U. S. Geological Survey approval to plug.

E Log analysis comments - None of the 40 50 minor shows detected in samples indicated favorable hydrocarbons/water ratio nor porosity above 5%. The two zones tested:

D.S.T. #1 Zone up to 20% porosity (4368) and only 41% Sw using a .1 Rw. There were no shows in samples but was a drilling break. D.S.T. #2 zone had ne sample shows either. 8% porosity and 52% Sw. Very pronounced drilling break.

4 March 1974 - Released water truck 0800. Lay down drill collars. Set plugs:

> 50 sacks 3100 - 2900 50 sacks 2525 - 2325 50 sacks 1775 - 1600 (show) 10 sacks to surface Last plug down 0900

Lay down drill pipe. Prep to tear down. Cut off aerator baffle tank.

4 March 1974 - confid

BIT REVIEW - contid

Bit # Co. Size	Туре	Depth out	Ft. Cut	Hrs.
2! STC 6!/4 22 " " 23 " " 24 " " 25 Sec. "	F SS SS 5 F 4 S-88	4864 5296 5455 5723 6000	429 437 159 268 277	40 1/4 41 1/2 23 1/ 21 1/2 31

Finish teardown. Rig released 2000 hrs.

Compiled and submitted by,

Geological Engineer

GSC:gb